

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

**MICROSCAN SYSTEMS, INC., a
Delaware Corporation.**

Plaintiff and
Counterclaim-Defendant,

V.

**COGNEX CORPORATION, a
Massachusetts Corporation,**

Defendant and
Counterclaim-Plaintiff,

And

COGNEX TECHNOLOGY AND
INVESTMENT CORPORATION

Additional Counterclaim-Plaintiff

Plaintiff Microscan Systems, Inc., (“Microscann”) filed this patent infringement action alleging that defendant Cognex Corporation (“Cognex”) has infringed United States Patent No. 6,105,869 (“the ‘869 patent”), which is titled “Symbol Reading Device Including Optics for

CASE NO. C08-833RSM

ORDER ON MOTIONS FOR SUMMARY JUDGMENT ON NON- INFRINGEMENT

1 Uniformly Illuminating Symbology.” This patent teaches a device for reading barcodes as well
2 as two-dimensional symbologies which cannot be scanned by a laser scanner. The device uses
3 light-emitting diodes (“LEDs”) to produce uniform, bright illumination of the barcode or symbol
4 being scanned. Microscan alleges that defendant Cognex Corporation (“Cognex”) infringes the
5 ‘869 patent by manufacturing, using, and selling its DataMan™ products. Amended Complaint,
6 Dkt. # 37. Cognex, in answering the complaint, counterclaimed for infringement of its own
7 Patent No. 6, 636,298 (“the ‘298 patent”), titled “Method and Apparatus for Focusing an Optical
8 Inspection System.” The Cognex counterclaim asks for declaratory judgments of non-
9 infringement and invalidity of Microscan’s ‘869 patent, as well as damages for infringement by
10 Microscan of the Cognex ‘298 patent. Answer, Dkt. # 40.

11 This matter is now before the Court for consideration of the parties’ motions for summary
12 judgment or partial summary judgment on non-infringement. Dkt. ##67, 84. The Court heard
13 oral argument on these motions, as well as Microscan’s motion for summary judgment of
14 infringement and a Cognex motion for summary judgment on invalidity of the ‘869 patent, on
15 September 1, 2010. In light of the parties’ approaching mediation date, the Court has determined
16 to issue an expedited ruling on the two non-infringement motions in order to narrow the issues
17 for mediation. For the reasons set forth below, both motions for summary judgment on non-
18 infringement shall be granted.

19 BACKGROUND

20 I. The Microscan ‘869 Patent

21 The ‘869 patent, with a filing date of October 31, 1997, was issued on August 22, 2000.

22 It summarizes the invention as follows:

1 The present invention is directed to a device and method for reading two-dimensional bar
2 code symbologies using an image sensor (a charge coupled device in the preferred
3 embodiment) in conjunction with an array of light-emitting diodes and an inventive
4 optical arrangement that substantially obviates one or more problems due to the
5 limitations and disadvantages of the prior art.

6 To achieve these and other advantages, and in accordance with the purpose of the present
7 invention, as embodied and broadly described herein, the invention is a method and
8 device for reading and interpreting two-dimensional symbologies. The method comprises
9 illuminating the 2-D symbologies using an illumination source (a plurality of LEDs in the
10 preferred embodiment), focussing the reflected image onto an image sensor (a CCD in
11 the preferred embodiment), and then interpreting the signal produced by the image
12 sensor. The light emitted from the LEDs is passed through a collimator and an optical
13 diffuser in order to provide a uniform high intensity illumination of the target symbol.
14 The emitted light may also be passed through a polarizer and the reflected light passed
15 through an analyzer (a second polarizing lens which is rotated 90 degrees from the first)
16 to remove the effects of specular reflection.

17 The present invention is preferably embodied in a device having a plurality of LEDs that
18 match the field of view of the imaging lens and the aspect ratio of the CCD. The LEDs
19 are arranged in an array which circumscribe the imaging lens optics. Sufficient energy is
20 collected and collimated by a series of optical lenses which allows image capture of
21 moving objects with very short exposure times some on the range of 1/10,000 of second
22 to 0.1250 of a second. The LEDs can have any suitable operating wavelength and
23 therefore may be visible or invisible to a human observer. Collimation can be
24 homogenized by use of holographic surface relief diffusers. The diffusers can be integral
25 to the scanner window, the collimator, or they can be a separate optical element having
26 optical power. The elimination can be linearly polarized to reduce specular reflection and
27 increased contrast from the target having both neighboring specular and diffuse reflecting
28 features by means of a polarizing optical element.

29 ‘869 Patent, col. 2 lines 41- 67; col. 3, lines 1-15.

30 The patent recites eighteen claims, of which at least four—Independent claims 1, 7, 12,
31 and 16—have allegedly been infringed by Cognex. The Cognex motion for partial summary
32 judgment of non-infringement addresses claims 1, 2, 6, 7, and 9-14. Independent claims 1, 7,
33 and 12 of the ‘869 patent are fully set forth here:

34 ORDER ON MOTIONS FOR SUMMARY JUDGMENT ON NON-INFRINGEMENT - 3

1 1. A device for reading optical code symbols, comprising:

2 a device casing having an open front end;

3 a charge coupled device image sensor having a focal plane and mounted within the
4 device casing, the charge coupled device image sensor operable to sense optical energy
5 reflected from the optical code symbol and provide data signals responsive to the sensed
6 optical energy;

7 an imaging lens optics assembly positioned and mounted within the device casing so as to
6 form an image on the focal plane of the charge coupled device image sensor;

7 a plurality of light emitting diodes mounted circumferentially to the imaging lens optics;

8 a plurality of collimators, each collimator positioned adjacent a respective one of the light
9 emitting diodes and operable to provide collimated optical energy responsive to optical
9 energy received from the adjacent light emitting diode; and

10 a plurality of light diffusers, each light diffuser positioned adjacent a respective one of
11 the collimators and operable to provide diffused optical energy responsive to collimated
12 optical energy received from the adjacent collimator, the diffusers collectively operable
13 to illuminate with diffused optical energy respective optical code symbols moving at high
14 speeds relative to the device casing, the diffused optical energy having sufficient power
15 to enable the image sensor to sense optical energy reflected from the optical code symbol
16 and provide data signals containing information about the sensed optical code symbol.

17 '869 patent, col. 5 lines 45-68; col 6 lines 1-8.

18 7. A device for reading and decoding optical code symbols comprising:

19 device casing having an open front end;

20 charge coupled device image sensor having a focal plane and mounted within said device
21 casing;

22 imaging lens optics positioned and mounted within said device casing so as to form an
23 image on the focal plane of said charge coupled device image sensor;

24 plurality of light emitting diodes mounted circumferentially to said imaging lens optic;
25 collimator positioned relative to said light emitting diodes wherein said collimator has a
26 plurality of collimating lenses so as to produce a field of illumination substantially
27 congruent to the field of view of said imaging lens optics; and

28 light diffuser positioned between said light emitting open front end of said device casing.

1
2 ‘869 patent, col. 6 lines 24-41.

3 **12.** A device for reading optical code symbols comprising:

4 an image sensor;

5 an imaging lens optics assembly positioned so as form an image on said image sensor;

6 a plurality of illumination sources mounted circumferentially to said imaging lens optics;

7 and

8 a plurality collimators, each collimator positioned adjacent a respective one of the
9 illumination sources and operable to provide collimated optical energy responsive to
10 optical energy received from the adjacent illumination source, the collimators collectively
11 operable to illuminate with collimated optical energy respective optical code symbols
12 moving at high speeds relative to the image sensor, the collimated optical energy having
13 sufficient power to enable the image sensor to sense optical energy reflected from the
14 optical code symbol without blur and provide data signals containing information about
15 the sensed optical code symbol.

16 ‘869 patent, col 6, lines 52-67; col 7, lines 1-3.

17 **II. The Cognex ‘298 Patent**

18 The ‘298 patent, with a filing date of December 18, 2001, was issued on October 21,
19 2003. The abstract states that the invention is

20 [a] method . . . for obtaining a focused image of an object in an application of
21 machine vision in an optical inspection system. A coarse focus setting is first
22 obtained by maximizing a coarse feature sharpness measurement performed on an
23 image of the object of inspection. Then, a fine focus setting is obtained by
24 maximizing a fine feature sharpness measurement performed on a portion of an
25 image of the object of inspection. Finally, the fine focused image can be further
26 analyzed, inspected, or otherwise processed.

27 ‘298 patent, Abstract. The introductory paragraph of the summary describes the invention as
28 follows:

In one general aspect of the present invention, a method is provided for determining an optimal focus setting of an optical imaging system comprising a coarse focus, followed by a fine focus. The coarse focus is attained by providing an image of an object under inspection through a range of possible focus settings, and measuring a sharpness response of the image. The coarse focus setting is determined when the sharpness response is measured to be at a maximum value. The fine focus is attained by starting at the coarse focus setting, and providing an image of the object under inspection through a range of possible fine focus settings, and measuring the fine feature sharpness response. The fine feature sharpness response can be determined from a portion of the image for which the optimal focus setting is desired. The optimal focus setting is determined when the fine feature sharpness response is measured to be at a maximum value.

‘298 patent, col. 2 lines 26-43.

The ‘298 patent recites twenty-five claims. In its counterclaims, Cognex alleges that Microscan is infringing one or more of these claims by making, using, selling or offering for sale its Quadrus Mini Imager product, and, on information and belief, its Quadrus Mini Velocity product. During the claims construction proceedings, Cognex defined the relevant claims of the ‘298 patent as claims 1, 5, 7, 10, 14, and 16. Declaration of Kevin Gannon, Dkt. # 45, Exhibit Q. Microscan’s motion for summary judgment of non-infringement addresses all six of these claims. Independent claims 1, 7, 10, and 16 shall be set forth in full here.

1. A method for determining an optimal focus setting of an optical imaging system, the method comprising:

in a range of coarse focus settings;

providing a first image of an object at a coarse focus setting;

measuring a coarse feature sharpness response of the first image;

setting a coarse focus to provide a maximum coarse feature sharpness response of the first image;

in a range of fine focus settings from the coarse focus;

providing a second image of the **object** at a fine focus setting, the second image having a fine focus area;

1 measuring the fine feature sharpness response of the fine focus area; and
2

3 setting the optimal focus to provide a maximum fine feature sharpness response.
4

‘298 patent, col. 13 lines 5-20.

5 **7.** An apparatus for focusing an optical inspection system, the apparatus comprising:
6 an object having a structure and a surface;

7 a camera for acquiring an image of the object;

8 focusing means for adjusting a focal distance between the camera and the object;

9 machine vision processor coupled to the camera, comprising;

- 10 a) coarse feature sharpness measuring means, in cooperation with the focusing means,
11 adapted to measure a coarse feature sharpness of at least a portion of the structure in
12 the image; and
13 b) fine feature sharpness measuring means, in cooperation with the focusing means and
14 the coarse feature sharpness measuring means, adapted to measure a fine feature
15 sharpness of at least a portion of the surface in the image.

16 ‘298 patent, col 13 lines 49-65.

17 **10.** A method for determining an optimal focus setting of an optical imaging system, the
18 method comprising:

19 in a range of coarse focus settings;

20 providing at least one first image of an object at a coarse focus setting;

21 measuring a coarse feature sharpness response of the at least one first image;

22 setting a coarse focus to provide a maximum coarse feature sharpness response of the at
23 least one first image;

24 in a range of fine focus settings from the coarse focus; providing at least one second
image of the object at a fine focus setting, the at least one second image having a fine
focus area;

measuring the fine feature sharpness response of the fine focus area; and

setting the optimal focus to provide a maximum fine feature sharpness response.

‘298 patent, col 14 lines 6-24.

16. A method for obtaining an optimally focused image of the surface of an **object**, the method comprising:

acquiring an image of the surface of the object;

localizing a coarse feature of the surface of the object;

performing a coarse feature sharpness measurement on the coarse feature;

using the coarse feature sharpness measurement, determining a maximum coarse feature sharpness measurement;

using the maximum coarse feature sharpness measurement, acquiring an image of a region of the surface of the object;

performing a fine feature sharpness measurement within the region;

using the fine feature sharpness measurement, determining a maximum fine feature sharpness measurement; and

using the maximum fine feature sharpness measurement to determine an optimal focus setting for obtaining an optimally focused image of the surface of the object.

'298 patent, col 14 lines 56-67; col 15 lines 1-8.

ANALYSIS

Summary judgment is as appropriate in a patent case as in any other when it is shown that no genuine issue of material fact remains for decision and that the moving party is entitled to judgment as a matter of law. *DMI Inc. v. Deere & Co.*, 755 F.2d 1570, 1573 (Fed.Cir.1985).

Patent infringement analysis is a two-fold inquiry: a threshold question of claim interpretation followed by a determination of whether the properly construed claims encompass the structure or process. *E.g. Texas Instruments v. U.S. Intern. Trade Com'n*, 988 F.2d 1165, 1171 (Fed.Cir.1993). The patentee bears the burden of proving infringement.

There are two ways to establish infringement: literal infringement and infringement under the doctrine of equivalents. Literal infringement of a patent requires every limitation set forth in a claim be found in the accused product. *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1577-78

1 (Fed.Cir.1989). Under the doctrine of equivalents, infringement may be found if the accused
 2 device performs substantially the same overall function in substantially the same way to obtain
 3 substantially the same result. *E.g. Pennwalt Corp. v. Durand Wayland Inc.*, 833 F.2d 931, 938
 4 (Fed.Cir.1987), *cert. denied*, 485 U.S. 961 (1988).

5 To establish literal infringement, the patentee must demonstrate that every claim
 6 limitation, or claim element, is found in the accused device. *Warner-Jenkinson Co. v. Hilton*
 7 *Davis Chemical Co.*, 520 U.S. 17, 29, 40 (1997). A demonstration that the accused method or
 8 device does not satisfy one claim limitation would support a finding of noninfringement. *Id.*
 9 Thus, an accused infringer “is entitled to summary judgment, on the ground of non-infringement,
 10 by pointing out that the patentee failed to put forth evidence to support a finding that a limitation
 11 of the asserted claim was met by the structure in the accused devices.” *Johnston v. IVAC Corp.*,
 12 885 F.2d 1574, 1578 (Fed.Cir.1989).

13 Under the doctrine of equivalents, a product that does not literally infringe a patent claim
 14 may still infringe if each and every limitation of the claim is literally or equivalently present in
 15 the accused device. See *Warner-Jenkinson*, 520 U.S. at 40, 117 S.Ct. 1040. Whether an element
 16 of an accused product infringes under the doctrine of equivalents depends in part on whether that
 17 component performs substantially the same function as the claimed limitation in substantially the
 18 same way to achieve substantially the same result. See *Ethicon Endo-Surgery, Inc. v. United*
 19 *States Surgical Corp.*, 149 F.3d 1309, 1315 (Fed.Cir.1998); *Pennwalt Corp. v. Durand-Wayland,*
 20 *Inc.*, 833 F.2d 931, 934-35 (Fed.Cir.1987) (en banc). If the differences between a claim and an
 21 accused device are “insubstantial” to one with ordinary skill in the art, the product may infringe
 22 under the doctrine of equivalents. See *Ethicon*, 149 F.3d at 1315; *Sage Prods., Inc. v. Devon*
 23 *Indus., Inc.*, 126 F.3d 1420, 1423 (Fed.Cir.1997). The doctrine prevents an accused infringer
 24

1 from avoiding infringement by changing minor details of a claimed invention while retaining its
2 essential functionality. *See Sage*, 126 F.3d at 1424.

3 The first step of claim interpretation was completed after the Court held a *Markman*
4 hearing in November, 2009. The Court's Order on Claim Construction was issued on February
5 1, 2010. Dkt. # 59. The parties' motions for summary judgment of non-infringement are based
6 on the Court's interpretation of certain claims in the two patents.

7 **A. Cognex Motion on Non-Infringement of the Microscan '869 Patent**

8 Cognex contends that it is entitled to summary judgment of non-infringement as to claims
9 1, 2, 6, 7, and 9-14, because each of these claims teaches a plurality of LEDs arranged
10 "circumferentially" around the imaging lens. Independent claims 1, 7, and 12 of the '869 patent
11 are fully set forth above to demonstrate this term. The Court construed the term circumferential
12 to mean "encircling or surrounding on all sides." Dkt. # 59, p. 16.

13 The Cognex device has LEDs arranged in a linear array on either side of the imaging
14 lens; none are placed above or below the lens. This arrangement is not "circumferential" as that
15 term was construed by the Court. Under "the long-established legal principle that non-
16 infringement is shown when an element or step in the claims is missing from the accused product
17 or process," the Court finds that the Cognex device does not literally infringe claims 1, 2, 6, 7,
18 or 9-14 of the '869 patent because the arrangement of the LEDs is not circumferential. *Amstar*
19 *Corp. v. Envirotech Corp.*, 730 F.2d 1476, 1484. (C.A.Fed. 1984). Microscan's arguments to
20 the contrary, mainly based on uniformity of illumination, amount to a request for reconsideration
21 of the Court's Order on claim construction, and fail to demonstrate that Microscan has met its
22 burden as to literal infringement.

23

24

1 Microscan also contends that the Cognex device infringes the asserted claims of the ‘869
 2 patent under the doctrine of equivalents, described above. This doctrine “allows the patentee to
 3 claim those insubstantial alterations that were not captured in drafting the original patent claim
 4 but which could be created through trivial changes.” *Festo Corp. v. Shoketsu Kinzoku Kogyo*
 5 *Kabushiki Co.*, 535 U.S. 722, 733 (2002). However, the doctrine of equivalents may not be used
 6 to “effectively eliminate” a claim limitation; under the vitiation rule announced by the Supreme
 7 Court, application of the doctrine to an individual element of a claim “is not allowed such broad
 8 play as to effectively eliminate that element in its entirety.” *Warner-Jenkinson Co.*, 520 U.S. at
 9 29.

10 Microscan’s argument under the doctrine of equivalents is directed at the
 11 “circumferential” claim limitation. Microscan contends that “an arrangement [of LEDs] that
 12 surrounds the imaging lens but leaves gaps above and below the lens is equivalent to an
 13 undoubtedly circumferential arrangement that also leaves gaps.” Microscan Opposition, Dkt. #
 14 104, p. 24. According, to Microscan, the difference is “simply one of degree.” *Id.* The Court
 15 does not reach this contention, because as Cognex points out, Microscan failed to identify this
 16 infringement contention in its initial disclosures as required by Local Patent Rule 120(e).¹
 17 Microscan has responded to this assertion by requesting, in a footnote in the opposition
 18 memorandum, leave to amend their disclosure of infringement contentions under Local Patent
 19 Rule 124(a). The cited rule states that amendment of the infringement contentions can only be
 20 made by Order of the Court “upon a timely showing of good cause.” Local Patent Rule 124.
 21

22 ¹ Local Patent Rule 120 requires that a party claiming patent infringement serve on all
 23 parties a “Disclosure of Asserted Claims and Infringement contentions” containing, among other
 24 information, a statement as to “[w]hether each element of each asserted claim is claimed to be
 literally present and/or present under the doctrine of equivalents in the Accused Device. . . .
 Local Patent Rule 120(e).

1 One example of “good cause” listed in the Local Rule is where a claim construction by the Court
 2 is different from that proposed by the party requesting leave to amend. *Id.*, paragraph (a). While
 3 it is the case that Microscan’s proposed claim construction for the term “circumferential” was not
 4 adopted by the Court, the request to amend the infringement contention, made several months
 5 after the Order on Claim Construction was filed, is untimely. The discussion of doctrine of
 6 equivalents by plaintiff’s expert Dr. Roger Palmer in his report, cited by plaintiff at oral
 7 argument, fails to cure the problem as the expert report does not constitute amendment of the
 8 infringement contentions within the meaning of the Local patent Rules.

9 Cognex’s motion for partial summary judgment is accordingly GRANTED. The Court
 10 finds, as a matter of law, that claims 1, 2, 6, 7, and 9-14 of the ‘869 patent are not infringed by
 11 the accused device.

12 **B. Microscan Motion on Non-Infringement of the ‘298 patent**

13 Microscan moves for summary judgment on non-infringement of Cognex patent ‘298
 14 claims. No. 1,5,10,14, and 16 on the basis that these claims include language regarding
 15 “determining an optimal focus setting.” The motion also addresses claim 7, which requires that
 16 the device be used to examine an object having “a structure and a surface,” as well as a “coarse
 17 feature sharpness measuring means.” Microscan analogizes the Cognex device to a highly
 18 technical microscope, which has a fine-focus and coarse-focus adjustment knob. The accused
 19 device is an optical scanner with “an automatic calibration function [which] is typically used to
 20 adjust several of the devices’ camera settings, including shutter speed, gain and focus.”

21 Microscan Motion, Dkt. # 84, p. 5. Cognex expert Dr. Stanley Sclaroff has opined that it is the
 22 autofocus feature of the calibration process that infringes the ‘298 patent.

23

24

1 Claim 1 in the Cognex patent, fully set forth above, is representative of the language
2 used in the other claims. The relevant language in claim 1 describes “[a] method for determining
3 an optimal focus setting of an optical imaging system.” ‘298 patent, col. 13, lines 5-6. After a
4 series of steps described in claim 1, the final steps are “measuring the fine feature sharpness
5 response of the fine focus area” and “setting the optimal focus to provide a maximum fine
6 feature sharpness response.” ‘298 patent, col. 13, lines 17-20. Independent claim 10 and
7 dependent claim 14 also require “setting the optimal focus to provide a maximum fine feature
8 sharpness response.” ‘298 patent, col. 14, lines 23-24. Independent claim 16 teaches “using the
9 maximum fine feature sharpness measurement to determine an optimal focus setting for
10 obtaining an optimally focused image of the surface of the object.” ‘298 patent, col. 15, lines 7-
11 9.

12 Microscan asserts, using diagrams, that in scanning a symbol its device automatically
13 chooses a focus point mid-way between the closest and farthest focus positions, rather than
14 choosing the peak sharpness. Since “optimal focus” necessarily means the peak of the sharpness
15 curve, it is Microscan’s position that its device does not determine an “optimal focus setting”
16 and thus does not infringe the ‘298 patent term, either literally or under the doctrine of
17 equivalents. Cognex, in opposition, argues that the device does infringe by
18 determining the inside and outside focus positions; i.e., the minimum and maximum
19 focus positions at which the feature sharpness is sufficient to enable decoding of the
20 symbol that appears within the fine focus area. The mid-point between the final
estimates of the inside and outside focus positions is computed as the optimal focus
to provide feature sharpness response.

21 Declaration of Benjamin Byer, Dkt. # 89, Exhibit C (Sclaroff Report), p. 13. This analysis,
22 however, does not establish that the “optimal” focus as determined by the accused device
23 (midway between the inside and outside positions) is the actual maximum sharpness of the
24

1 image. As demonstrated by the asymmetric curves drawn by plaintiff's expert Steven Tanimoto,
 2 the peak sharpness is at the highest point of the sharpness curve, not at the midpoint.² Cognex
 3 has not disputed Microscan's assertion that the actual "optimal focus" as the term is used in the
 4 '298 patent is the peak or highest point of the sharpness curve. As described by plaintiff's
 5 expert, the optimal focus position as determined by the Microscan device for the purposes of
 6 scanning code does not coincide with the peak sharpness response or "optimal focus" as taught
 7 in the '298 patent. Cognex has failed to come forward with any evidence to dispute this fact.
 8 As the method of determining focus position used in the accused device does not require "setting
 9 the optimal focus to provide a maximum fine feature sharpness response," it does not infringe
 10 claims 1,5,10,14, or 16.

11 Microscan also moves for summary judgment on non-infringement as to claim 7 of the
 12 '298 patent. Independent Claim 7 asserts:

13 An apparatus for focusing an optical inspection system, the apparatus
 14 comprising: **an object having a structure and a surface**; a camera for acquiring
 15 an image of the object; focusing means for adjusting a focal distance between the
 16 camera and the object; machine vision processor coupled to the camera,
 17 comprising; a) coarse feature sharpness measuring means, in cooperation with
 18 the focusing means, adapted to measure a coarse feature sharpness of at least a
 19 portion of the structure in the image; and b) **fine feature sharpness measuring**
 20 **means**, in cooperation with the focusing means and the coarse feature sharpness
 21 measuring means, adapted to measure a fine feature sharpness of at least a
 22 portion of the surface in the image.

23 '298 Patent, col.13, lines 48-65 (emphasis added).

24 ² Cognex complains that "Microscan provides no information in its Motion as to what
 25 'accused device' yielded the Figure 1 curve." Cognex Opposition, Dkt. # 101, p. 8. The
 26 diagram labeled Figure 1 in Microscan's motion is a reproduction of Figure 9 of Steven
 27 Tanimoto's rebuttal expert report. Declaration of Benjamin Byer, Dkt. # 89, Exhibit B. Dr.
 28 Tanimoto stated in his report that the accused devices which he analyzed were the Quadrus Mini
 29 and the Quadrus Mini Velocity. *Id.*, p. 4. The Court deems it unnecessary for plaintiff to
 30 distinguish between these two devices for the purposes of the analysis set forth in the motion.

1
2 In the Order on claim construction, the Court construed the term “structure,” first observing that
3 “[t]he object has both a structure and a surface, so the term “structure” must refer to three-
4 dimensional depth.” Order on Claim Construction, Dkt. # 59, p. 23. The Court then construed
5 the term “structure” to mean “the physical organization of attributes or parts of an object.” *Id.*
6 In moving for summary judgment of non-infringement on this claim, Microscan argues that the
7 accused device does not infringe claim 7 of the ‘298 patent because it examines only printed
8 barcodes and symbologies, neither of which has a three-dimensional structure. Further, claim 7
9 requires a “fine feature sharpness measuring means,” something that has not been identified in
10 the accused product.

11 Cognex advances several arguments in opposition. First, Cognex contends that the object
12 being examined, a barcode, has a “structure” in the “physical organization of the symbol’s
13 attributes or parts.” Cognex Corporation’s Opposition, Dkt. # 101, p. 13. This argument
14 disregards the Court’s statement, set forth above, that a “structure” must have three-dimensional
15 depth. Placement of the barcode symbol on a curved surface does not satisfy the three-
16 dimensional requirement of a “structure.” Next, Cognex argues that the accused device can read
17 “DPM” (Direct Product Marketing) symbols which are etched on the surface of a product, and
18 thus have “depth” as well as ink-dot symbols, which are raised. This argument would read out of
19 claim 7 the requirement that the object being inspected have both a structure and a surface, and is
20 therefore unavailing.

21 With respect to the “fine feature sharpness measuring means,” Cognex contends that this
22 element is satisfied, at least by equivalents, by the accused device’s focusing system because it is
23
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"akin to the 'edgelet counting' means of the '298 patent." Cognex Opposition, Dkt. # 101, p.

12. Cognex expert Stanley Sclaroff explained in his declaration,

This edgelet counting consists of two separate steps. First edgelets are detected---this first step can involve direct measurement of pixel variations to determine where the edges are located in the image. Second, the edgelets are counted---this second step does not involve direct measurement of pixel variation, instead the edgelets detected in the previous step are counted (no pixel values are considered). . . .

Similarly, the autofocus means employed in the Accused Products involves the analysis of pixel variation to localize feature, for example the corners, lines, edges, blocks and boundaries that make up symbols within the image. The subsequent step in the Accused Products involves counting or considering the arrangement of the blocks, lines, or dots within the symbol to decode it and/or measure the symbol quality.

Declaration of Stanley Sclaroff, Ph.D., Dkt. # 102, ¶¶ 20, 21.

Microscan asserts that the only “counting” executed by the accused device occurs

“when extracting and reading the data encoded within the barcode, such as a barcode that encodes a product’s price of “\$1.99.” Microscan’s Reply, Dkt. # 116, p. 8.

According to this argument, the counting as part of reading data encoded in the barcode

is unrelated to the autofocus feature of the accused device, and cannot satisfy the

“sharpness measuring means” element in claim 7. The Court finds this argument very

persuasive. Even if it were not, however, Microscan has already demonstrated that the

accused device does not satisfy the “structure” element of claim 7, and is entitled to

summary judgment of non-infringement of this claim on that basis alone. *Johnston v.*

IVAC Corp., 885 F.2d at 1578.

CONCLUSION

As set forth above, each party has met the burden of demonstrating non-

infringement of the asserted claims in the opposing party's patent. Accordingly, the

1 Cognex motion for partial summary judgment of non-infringement of certain
2 enumerated claims of the '869 patent (Dkt. # 67) is GRANTED. Microscan's motion
3 for summary judgment on non-infringement of the '298 patent (Dkt. # 84) is also
4 GRANTED. The Court reserves ruling on the remaining pending motions as to
5 infringement and invalidity of the '869 patent until after the parties have completed
6 mediation.

7 Dated this 10th day of September, 2010.

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11 RICARDO S. MARTINEZ
12 UNITED STATES DISTRICT JUDGE
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